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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,543	12/18/2001	Jerry L. Mizell	14413RRUS01U	8303

7590 07/31/2009

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ART UNIT	PAPER NUMBER
2419	
MAIL DATE	DELIVERY MODE
07/31/2009	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/025,543
Filing Date: December 18, 2001
Appellant(s): MIZELL ET AL.

Brandi W. Sarfatis
For Appellant

This is in response to the appeal brief filed 4/23/2009 appealing from the Office action mailed 11/07/2008.

EXAMINER'S ANSWER

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

7072300 B1	CHOW et. al.	7-2006
7023820 B2	CHASKAR	4-2006

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US Patent 7072300 B1), in view of Chaskar (US Patent 7023820 B2).

3. In regards to claim 1, Chow shows in figure 3 a multiport switch inclusive of a port filter 316, an action generator 318 and an action tag generator 340. The port filter 316 may include logic for determining policy information associated with the received data frames (filtering a packet of data to determine an application associated therewith for processing the packet) (see column 7, lines 6-15). The port filter may apply policy rules to the received data frames to identify one or more policy equations relating to the data frames; furthermore, the action generator component 318 in conjunction with action tag generator 340, operates upon the result of the port filter 316 to generate an action tag for each of the received data frames (applying a service marking to the packet) (see column 7, lines 8-11 and column 7, lines 16-20). A policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (the service marking dependent on the application associated with the packet) (see column 7, lines

11-15). Chow discloses the above-mentioned filtering and application process for an Ethernet network and fails to teach such an application being applied to a mobile telecommunication network.

However, Chaskar teaches applying differential services in a mobile telecommunications network (see figure 3, an intermediate node).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the filtering and application process taught by Chow into the differential services intermediate node taught by Chaskar. The motivation to do so would be to provide a technique that supports various QoS classes across a GPRS core network (see column 3, lines 31-33 in Chaskar).

In regards to claim 2, Chow shows in figure 3 a multiport switch inclusive of a port filter 316, an action generator 318 and an action tag generator 340. The port filter 316 may include logic for determining policy information associated with the received data frames (reading a port from the packet and determining the application form the read port) (see column 7, lines 6-15).

In regards to claim 3, figure 4 in Chow is a diagram of action generator component 318, port filter 316, and action tag generator 340. Decoder 411 in the action generator component 318 receives the policy information from port filter 316 as an identification of one or more applicable policy equations. The decoder 411 in response may select the highest priority policy equation as a match. Decoder 411 then outputs an address corresponding to the matched policy equation to action memory 412 (interrogating a table with the read port), which uses the address to output an action tag.

Action memory 412 may be constructed as a table having 64 row entries, each corresponding to one of the 64 bit policy equations (the table including an index of at least one port, each of the at least one port comprises a key of the table (one of the 64 bit policy equations)) (see column 7, lines 56-67). Furthermore, a policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (a record having a service marking respectively associated with each of the keys) (see column 7, lines 11-15).

Furthermore, as stated above, the decoder 411 in response the received policy information from the port filter 316 may select the highest priority policy equation as a match (determining the read port has a match with a first one of the keys of the table) (see column 7, lines 58-61).

Furthermore, decoder 411 may output the number of the selected policy equation (1-64) which directly address the appropriate row of the action memory 412 (returning the service marking included in the record associated with the first one of the keys) (see column 7, line 67 and column 8, lines 1-3).

In regards to claim 4, result tag interface 413, in response to receiving the DSCP field from state machine 410 and the table entry 500 from action memory 412, generates a complete action tag and forwards it to action tag generator 340 (see column 8, lines 33-44). Figure 6 is a diagram of an action tag 600 generated by result tag interface 413 and received by action tag generator 340. The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that

is to be given to the data frame (writing the service marking included in the record associated with the first one of the keys into a field of the packet) (see column 8, lines 51-55).

In regards to claim 5, The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (see column 8, lines 51-55).

In regards to claim 6, figure 4 in Chow is a diagram of action generator component 318, port filter 316, and action tag generator 340. Decoder 411 in the action generator component 318 receives the policy information from port filter 316 as an identification of one or more applicable policy equations. The decoder 411 in response may select the highest priority policy equation as a match. Decoder 411 then outputs an address corresponding to the matched policy equation to action memory 412 (interrogating a table with an identification of an application for processing the packet obtained from the packet), which uses the address to output an action tag. Action memory 412 may be constructed as a table having 64 row entries, each corresponding to one of the 64 bit policy equations (the table including an index including at least one key (one of the 64 bit policy equations)) (see column 7, lines 56-67). Furthermore, a policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (each key having a record associated therewith, each record having a service marking therein respectively associated with each of the keys) (see column 7, lines 11-15).

Furthermore, as stated above, the decoder 411 in response the received policy information from the port filter 316 may select the highest priority policy equation as a match (see column 7, lines 58-61).

Furthermore, decoder 411 may output the number of the selected policy equation (1-64) which directly address the appropriate row of the action memory 412 (the service marking returned upon a match between the identification and one of the keys) (see column 7, line 67 and column 8, lines 1-3).

Chow discloses the above-mentioned filtering and application process for an Ethernet network and fails to teach such an application being applied to a mobile telecommunication network.

However, Chaskar teaches applying differential services in a mobile telecommunications network (see figure 3, a SGSN , an intermediate node 304, a GGSN (any of which read on a node of a mobile telecommunications network operable to deliver at least one packet to a mobile device serviced by the mobile telecommunication network). Furthermore, since the SGSN, the intermediate node and the GGSN are all inter face with each other so Chaskar also reads on an interface to at least one other network node.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the filtering and application process taught by Chow into the differential services intermediate node taught by Chaskar. The motivation to do so would be to provide a technique that supports various QoS classes across a GPRS core network (see column 3, lines 31-33 in Chaskar).

In regards to claim 7, Chow in combination with Chaskar teaches all the limitations of parent claim 6. Since Chow fails to show a mobile network, Chow also fails to show an access router that interfaces the mobile telecommunications network with an external network.

Chaskar however shows a GGSN in figure 3.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the filtering and application process taught by Chow into the differential services intermediate node taught by Chaskar. The motivation to do so would be to provide a technique that supports various QoS classes across a GPRS core network (see column 3, lines 31-33 in Chaskar).

In regards to claim 8, result tag interface 413, in response to receiving the DSCP field from state machine 410 and the table entry 500 from action memory 412, generates a complete action tag and forwards it to action tag generator 340 (see column 8, lines 33-44). Figure 6 is a diagram of an action tag 600 generated by result tag interface 413 and received by action tag generator 340. The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (writing the returned service marking into a field of the packet) (see column 8, lines 51-55).

In regards to claim 9, The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (see column 8, lines 51-55).

In regards to claim 10, The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (see column 8, lines 51-55).

In regards to claim 11, Chow in combination with Chaskar teaches all the limitations of parent claim 6. Since Chow fails to show a mobile network, Chow also fails to show the node being a general packet radio services support node.

Chaskar however shows a GGSN and an SGSN in figure 3.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the filtering and application process taught by Chow into the differential services intermediate node taught by Chaskar. The motivation to do so would be to provide a technique that supports various QoS classes across a GPRS core network (see column 3, lines 31-33 in Chaskar).

In regards to claim 12, figure 4 in Chow is a diagram of action generator component 318, port filter 316, and action tag generator 340. Decoder 411 in the action generator component 318 receives the policy information from port filter 316 as an identification of one or more applicable policy equations. The decoder 411 in response may select the highest priority policy equation as a match. Decoder 411 then outputs an address corresponding to the matched policy equation to action memory 412 (interrogating a table with an identification of an application obtained from the packet), which uses the address to output an action tag. Action memory 412 may be constructed as a table having 64 row entries, each corresponding to one of the 64 bit policy equations (the table comprising one or more keys having a value indicative of an

application for processing packets and at least one record associated with each of the one or more keys having a value indicative of an application, each of the one or more records having a service marking stored therein (one of the 64 bit policy equations)) (see column 7, lines 56-67). Furthermore, a policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (each key having a record associated therewith, each record having a service marking therein respectively associated with each of the keys) (see column 7, lines 11-15).

In further regards to claim 12, result tag interface 413, in response to receiving the DSCP field from state machine 410 and the table entry 500 from action memory 412, generates a complete action tag and forwards it to action tag generator 340 (transmitting the packet) (see column 8, lines 33-44). Figure 6 is a diagram of an action tag 600 generated by result tag interface 413 and received by action tag generator 340. The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (writing the returned service marking into a field of the packet) (see column 8, lines 51-55).

Chow discloses the above-mentioned filtering and application process for an Ethernet network and fails to teach such an application being applied to a mobile telecommunication network.

However, Chaskar teaches applying differential services in a mobile telecommunications network (see figure 3, an intermediate node, a GGSN and a SGSN

(any of which can be a first service node), a BSS (a base station sub system and a BTS since a BTS in included in a BSS)).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the filtering and application process taught by Chow into the differential services intermediate node taught by Chaskar. The motivation to do so would be to provide a technique that supports various QoS classes across a GPRS core network (see column 3, lines 31-33 in Chaskar).

In regards to claim 13, Chow shows in figure 3 a multiport switch inclusive of a port filter 316

In regards to claim 14, The DSCP/priority field 605-610 may include data that identifies a service that is to be provided or a priority that is to be given to the data frame (see column 8, lines 51-55).

In regards to claim 15, the multiport switch (a switch cannot operate without some sort of a processing unit (CPU)) in Chow is inclusive of an action generator 318 which further includes action memory 412 (a memory bank), a port filter 316 (a filter, a port number field of the packet read by the filter).

Furthermore figure 4 in Chow is a diagram of action generator component 318, port filter 316, and action tag generator 340. Decoder 411 in the action generator component 318 receives the policy information from port filter 316 as an identification of one or more applicable policy equations. The decoder 411 in response may select the highest priority policy equation as a match. Decoder 411 then outputs an address corresponding to the matched policy equation to action memory 412 which uses the

address to output an action tag. Action memory 412 may be constructed as a table having 64 row entries, each corresponding to one of the 64 bit policy equations (the value of the port number read used by the node to interrogate the table) (see column 7, lines 56-67). Furthermore, a policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (see column 7, lines 11-15).

In regards to claim 16, the multiport switch (a switch cannot operate without some sort of a processing unit) in Chow is inclusive of an action generator 318 which further includes action memory 412 (a memory modules), a port filter 316 (a filter operable to analyze the packet and determine the value indicative of the application).

Furthermore figure 4 in Chow is a diagram of action generator component 318, port filter 316, and action tag generator 340. Decoder 411 in the action generator component 318 receives the policy information from port filter 316 as an identification of one or more applicable policy equations. The decoder 411 in response may select the highest priority policy equation as a match. Decoder 411 then outputs an address corresponding to the matched policy equation to action memory 412 which uses the address to output an action tag. Action memory 412 may be constructed as a table having 64 row entries, each corresponding to one of the 64 bit policy equations (see column 7, lines 56-67). Furthermore, a policy equation may specify the type of processing to be given to a received data frame, such as whether the data frame should receive expedited, assured, or default processing (see column 7, lines 11-15).

(10) Response to Argument

The Appellant argues with regards to claim 1 on page 3 of the Appeal Brief that Chow fails to teach or suggest "filtering a packet of data to determine an application associated therewith for processing the packet...., where the underlined portions are emphasized. The Appellant further argues that the examples of such applications for processing packets within the context of the claim language are identified *inter alia* at page 10, lines 11-20, of the present specification and include, but are not limited to, wireless email, Internet browsing and streaming media. However, the examiner respectfully disagrees that the term "application" is limited to these enumerated examples.

"During examination, the claims must be interpreted as broadly as their terms reasonably allow." MPEP § 2111.01 (I) (citing to *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)). "This means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification." MPEP § 2111.01 (I) (citing to *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004)). However, "'[t]hough understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim.'" MPEP § 2111.01 (II) (quoting *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004)). Furthermore, while "[a]n Appellant is entitled to be his or her own lexicographer [to

thereby] rebut the presumption that claim terms are to be given their ordinary and customary meaning", this should be done "by *clearly setting forth* a definition of the term that is different from its ordinary and customary meaning(s)." MPEP § 2111.01 (IV) (citing to *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994)) (emphasis added).

Therefore, the following definitions of the term application are relevant: According to the The Authoritative Dictionary of IEEE Standards Terms "application" is defined as "A computer program that performs some desired function." According to the Microsoft Computer Dictionary the term "application" is defined as "A program designed to assist in the performance of a specific task." Therefore, the plain meaning of the term "application" is a program that implements a desired function, i.e. a specific task.

The Appellant's examples of "applications" fit within the plain meaning of the term, by providing these examples the Appellant has not clearly set forth a definition of the term that is different from its ordinary and customary meaning. Therefore, the examiner is required to use the plain meaning of the term "application" for purposes of interpreting the claims.

The Appellant argues on pages 3-4 of the Appeal Brief that the type of processing that may be given to a packet according to Chow comprises "whether the data frame should receive expedited, assured or default processing or whether the data frame should be dropped or sent to a management device." The examiner asserts that the type of processing is a program that implements a desired function (i.e. expedited

processing, assured processing or default processing). As such, the examiner maintains that the teachings of Chow read on the claimed limitation.

In view of the foregoing, the examiner maintains that the combination of Chow and Chaskar render obvious the claims. In addition, the examiner notes that if the Appellant desires the term "application" to carry a special meaning, then the Appellant is free to amend the claims to incorporate such a special meaning.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/JAY P PATEL/

Examiner, Art Unit 2419

Conferees:

/Daniel J. Ryman/

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